

Dear Mr. Nourse and Mr. Dias:

Responses to the following questions will be necessary for Commission Staff to perform a comprehensive review of your application for certification as an eligible Ohio renewable energy resource generating facility. Please file your responses in the PUCO Docketing Information System under case number 10-387-EL-REN. Please feel free to copy and paste the questions into a word document in order to provide your answers and for the purpose of e-filing the signed document. If you have any questions, please feel free to reply to this email.

Thank you.

Anne Goodge
Energy & Environment Department
Public Utilities Commission of Ohio

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**Case No. 10-387-EL-REN
Picway Generating Station
Staff Interrogatories – Initial Set**

Question 1: In Section B of the application, please provide the name of the facility owner.

Answer 1: [Columbus Southern Power Company \(CSP\)](#) is the plant owner and should be listed as the facility owner. Joe Hamrock is the Chief Executive Officer of CSP; his address is 1 Riverside Plaza, Columbus, Ohio 43215 and his e-mail address is jhamrock@aep.com.

Question 2: Please complete section D of the application (Name of Generation Facility Operating Company, Organization, Street Address, City State, Zip Code, E-Mail Address).

Answer 2: D. [Name of Generation Facility Operating:](#) [Columbus Southern Power Company](#)
[Legal Name of Contact Person:](#) Mary E. Zando
[Title:](#) Plant Manger
[Organization:](#) Picway Plant
[Street Address:](#) 9301 U.S.Rt.23
[City:](#) Lockbourne [State:](#) Ohio [Zip Code:](#) 43137
[Country:](#) USA
[Phone:](#) 614.835.3000 [Fax:](#) None Listed [Email Address:](#) mezando@aep.com
[Web Site Address:](#) www.aep.com

Question 3: In Section I, what is the expected heat content (BU/lb.), moisture, ash and sulfur content for each of the potential fuel types listed, biomass sources and coal?

Answer 3: Based on the current source of biomass it is expected to have a heat content of ~7,000 – 7,500 Btu/lb, moisture content of ~12%, ash less than 3%, and a sulfur content of less than 0.15%. If additional biomass fuel sources that are technically and economically acceptable are identified, these quality attributes will likely change based upon the newly identified biomass fuel quality.

Biodiesel will have a heat content of ~130,000 Btu/gallon and a sulfur content of less than 15 ppm.

The coal will have an average heat content of 11,500Btu/lb, moisture content of 7%, ash of 10%, and SO₂ emission rate of 3.2lbs/mmBtu. These are average values.

Question 4: In section I1 of the application, in addition to the projected annual generation given for Unit 5, what is the projected annual generation from the renewable biomass resources for Unit 5 in the test phases and long term?

Answer 4: For the test phase the expected generation is ~14,000 MWh. The results from the test, along with other economic drivers, will impact the expected generation from the renewable biomass resource and is not known at this time.

Question 5: Please clarify: is the description in G.2 just for the biomass resources? Will the testing of the heat content of the coal and biomass fuels be measured separately before blending? Will the biomass fuels be weighed separately from the coal? Will the company maintain documentation of these test results for the heat content and weight of the fuels?

Answer 5: The testing of the heat content of the coal and biomass will be done separately before blending per ASTM standards. The biomass will arrive at the plant and be weighed following the same procedures as coal (As-received). The company does and will maintain documentation of these test results for the heat content and the weight of the fuels.

Question 6: Will the facility use neat biodiesel (B100) or a blend?

Answer 6: The current plan is to use a blend of diesel and biodiesel. The blend is required in part due to the cold weather implications with the neat biodiesel (B100). The test is required to determine the appropriate blend.

Question 7: In Section G of the application, please clarify how the actual portion of the neat biodiesel used will be measured (gallons) and verified.

Answer 7: The current plan is to have the biodiesel blended by the supplier. The process that the supplier will use to load the truck is to first put in the desired amount of biodiesel into the truck. This quantity is measured by a meter ticket. Once the biodiesel is loaded, the desired amount of diesel is added into the truck. This is also measured by a meter ticket. The meter is certified by a third party following the suppliers' processes and procedures.

There is a potential that blending will be done at the AEP on a weighted average basis. The fuel tank indicator will be used for the weighted average calculation.

The plant has two ways to measure the amount of biodiesel/oil consumed. First is at the fuel tanks. Each tank has a level indicator that shows the amount of fuel in the tanks. This reading is obtained and logged once per shift when in the unit is in operation.

The second method is the in line flow meter. The plant will read and log this meter reading during unit start up to check on how much fuel biodiesel/oil was consumed. All biodiesel/oil that is consumed must flow through this meter. This flow meter is the device that provides data to the system used to track consumption.

Question 8: Please describe the sources of the biomass fuel, including the states or regions from which the material originates, and the estimated number of suppliers that will be used. If cabinet sawdust residue will be included, please characterize the content.

Answer 8: The intent of the application to certify Picway as a renewable generating facility prior to proceeding with long term fuel procurement. There is a cost impact to generate renewable energy and in this case specifically to burn biomass fuel. AEP is working to first get the determination from the PUCO that any renewable energy generated from renewable fuel consumed that qualifies under SB 221 and the PUCO rules will result is certified Renewable Energy Credits on a heat input basis.

It is not practical to secure and contract renewable biomass fuel on a long term basis without certification of the unit as a renewable generating facility and further testing of biomass at this unit.

For the short term testing, a Purchase Order has been issued to a biomass pellet fuel supplier.

AEP is working to comply with the renewable energy requirements set forth in SB 221 and to optimize the fuel procurement plan. Due to the high transportation costs of the biomass fuel it is likely that the fuel will come from Ohio or the surrounding states, however that is not defined at this time. The number of suppliers has also not determined at this time.

Currently, AEP is planning to utilize biomass pellets comprised of woody biomass and/or herbaceous crops. Sawdust, wood pellets, or other qualifying resources could potentially be added to the fuel supply based on testing results.

There is no plan to include residue cabinet sawdust as a biomass fuel source. The residue cabinet sawdust has arguably been treated and processed and it may not qualify as a renewable resource under the definition. A clarification by the commission of this interpretation would be appreciated.

Question 9: Please indicate the commitment and measures that will be undertaken by the company to ensure long-term procurement of an environmentally sustainable biomass fuel supply.

Answer 9: AEP requires in the commercial agreements that the Seller represents that the Biomass fuel is in compliance with the "Biomass Energy" definition contained in paragraph E of Chapter 4901:1-40-01 of the Public Utility Commission of Ohio rules (link: [http://www.puc.state.oh.us/emplibrary/files/legal/rules/chapters/4901\\$1-40.doc](http://www.puc.state.oh.us/emplibrary/files/legal/rules/chapters/4901$1-40.doc)), meets the definition of Biomass as defined above and is in compliance with all Federal and State laws and regulations. In addition, AEP is working with the internal and external experts in the forestry industry to properly document the biofuels Sustainable Forestry Initiative (SFI) protocols.

Question 10: Please indicate the status of any environmental permits that are required for biomass fuel testing at the facility.

Answer 10: Two Permit to Install (PTI) Exemption Letters were submitted to the Ohio EPA on 3/22/2010. It is expected that a determination will be provided for the biodiesel test by the beginning of May and for the biomass test by the end of May.